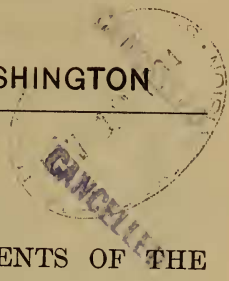
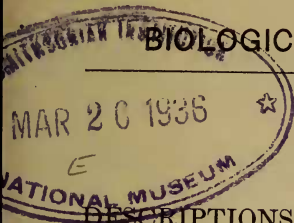


PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON



DESCRIPTIONS OF TWO NEW RODENTS OF THE GENUS PHENACOMYS.

BY A. BRAZIER HOWELL.

In the course of a study of the microtine genus *Phenacomys*, based largely on specimens in the Biological Survey Collection, U. S. Department of Agriculture, it has been found necessary to recognize two additional races heretofore undescribed. These may be known as follows:

Phenacomys intermedius levis, subsp. nov.

Alberta *Phenacomys*.

Type from Saint Mary's Lake, Teton County, Montana. Male adult; No. 72,405, U. S. National Museum (Biological Survey Collection); collected by A. H. Howell, May 23, 1895; original No. 13.

Diagnosis.—Smallest race of this genus, being somewhat smaller than *P. i. intermedius* but indistinguishable from certain skins of the latter in color. The skull of *levis* is much smaller, with rostrum, which although relatively shorter, is more robust. The bullae are proportionately larger and the incisive foramina smaller.

Measurements.—Average of eight adult topotypes (collectors' figures): Total length, 138; tail, 34; foot, 17.6. Average of seven adult skulls of topotypes: condylobasilar length, 22.5; nasals, 7.2; interorbital breadth, 3.6; zygomatic breadth, 14; lambdoidal width, 11; incisive foramina, 4.5; maxillary tooththrow, 5.8; height, 8.4.

Geographic distribution.—The eastern slope of the Rocky Mountains at least from central Alberta south to Teton County, Montana.

Remarks.—This race may be easily told from its neighbors by its small size. The animals from the neighborhood of Smoky River, central Alberta, are not quite typical, but are much closer to *levis* than to any other form.

This race seems to be confined to the easternmost part of the Rocky Mountain slopes in the range indicated, for it evidently does not penetrate for any distance into British Columbia, and is not found in western nor southern Montana.

Phenacomys intermedius celsus, subsp. nov.

Sierran Phenacomys.

Type from Muir Meadow at 9300 feet, Tuolumne Meadows, Yosemite National Park, California. Male adult; No. 109,103, U. S. National Museum (Biological Survey Collection); collected by J. H. Gaut, August 13, 1901; original No. 250.

Diagnosis.—A race slightly smaller and very much paler than *Phenacomys intermedius olympicus*, to which it is most closely related. Skull with larger braincase, stouter though no longer rostrum, and practically no indication of interorbital ridging. The incisive foramina are much smaller and the molars very much heavier. The skins are quite comparable with the paler specimens of *P. i. intermedius*, but skulls of typical *celsus* may be told at a glance by their very much larger size, heavier rostra and larger bullae.

Measurements.—Average of five adults from the Yosemite Park (collectors' figures): Total length, 148; tail, 39; foot, 18. Average of three adult skulls from the same region: condylobasilar length, 24.1; nasals, 7.8; interorbital breadth, 4; zygomatic breadth, 15.8; lambdoidal width, 11.9; incisive foramina, 4.3; maxillary toothrow, 6.2; height, 9.4.

Geographic distribution.—So far as known, the Sierra Nevada of California from the Yosemite Park north to the vicinity of Lake Tahoe.

Remarks.—This race, although considered closest in relationship to *P. i. olympicus* is readily distinguishable, by both external and cranial characters. Furthermore, the two races are separated by a quite different animal which ranges into the mountains of southern Oregon and northern California and whose affinities are clearly with *P. i. intermedius* of the Great Basin and Rocky Mountains.

Individuals from the vicinity of Lake Tahoe are not typical of *celsus*, but are nearer this than to anything else now recognized.